## WHAT IS CLAIMED IS:

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1. A polycarbodiimide copolymer having a repeating structural unit represented by the following formula (1) in a number "m":

$$- \left( -R^1 - N = C = N - \right)$$
 (1)

(wherein R<sup>1</sup> means a naphthylene group) and a repeating structural unit represented by the following formula (2) in a number "n":

$$- \left( -R^2 - N = C = N - \right)$$
 (2)

(wherein R<sup>2</sup> means an organic diisocyanate residue other

than the aforementioned R<sup>1</sup>) and also having on both termini
a terminal structural unit derived from a monoisocyanate,
wherein m + n is from 3 to 200 and n/(m + n) is from 0.05
to 0.99.

- The polycarbodiimide copolymer according to claim
   1, wherein n in the aforementioned formula is an integer of from 3 to 198.
  - 3. A solution of a polycarbodiimide copolymer, comprising an aprotic organic solvent and the polycarbodiimide copolymer of claim 1 dissolved therein.

- 4. A solution of a polycarbodiimide copolymer, comprising an aprotic organic solvent and the polycarbodiimide copolymer of claim 2 dissolved therein.
- 5. A method for producing a polycarbodiimide

  5 copolymer, which comprises carrying out carbodiimidation reaction of an organic diisocyanate and a monoisocyanate in the presence of a carbodiimidation catalyst, wherein the reaction is carried out at a temperature of from 0 to 120°C using 5% by mol or more of naphthalene diisocyanate based

  10 on the total organic isocyanate.